

Mammography Phototimer Consistency Testing Slabs

Models 014A, 014AD, 014B, 014F



Model 014A Shown

BETTER THAN PMMA FOR AEC CALIBRATION

The American Cancer Society and American College of Radiology guidelines for the screening of asymptomatic women have made over 50 million women candidates for mammography. In view of the staggering numbers involved, it is critically important that simple but reliable methods be developed to assess system performance and to assure consistent production of diagnostically useful images.

CIRS Phototimer Consistency Testing Slabs are designed for precise assessment of AEC system performance in accordance with American College of Radiology and MQSA recommendations. BR-12 (47% glandular / 53% adipose) is most commonly used but other glandular equivalencies are available. Unlike acrylic, these testing slabs are manufactured with very tight thickness tolerances and more accurately simulate real breast tissue over the range of energies used in mammography.

Features

- Assess AEC system performance
- Comply with ACR & MQSA recommendations
- Available in multiple configurations

MAMMOGRAPHY PHOTOTIMER CONSISTENCY TESTING SLABS

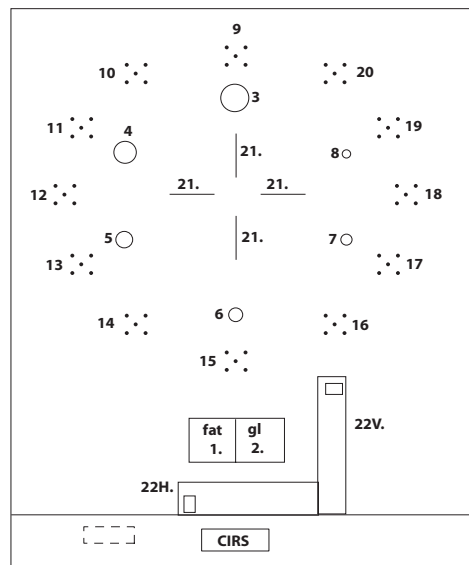
MODEL NO.	STANDARD GLANDULARITY	QUANTITY	LENGTH (CM)	WIDTH (CM)	THICKNESS (CM)
014A	BR12 or BR50/50	3	12.5	10	2
		2	12.5	10	1
		1	12.5	10	0.5
014AD*	BR50/50	2	12.5	10	2
		1	12.5	10	2 (with embedded detail plate)
		2	12.5	10	1
		1	12.5	10	0.5
014B	BR12 or BR50/50	4	12.5	10	2
014F*	BR50/50	1	12.5	10	2 (with embedded detail plate)

Mammography slabs are available individually in various glandularities, sizes, and thicknesses. Refer to Model numbers beginning with "ST" for pricing. Standard glandularities include 100% gland, 30/70, BR12, 50/50, 70/30 and 100% adipose. Standard thicknesses include 0.1, 0.2, 0.5, 1, 2, 3, 4, 5, 6 and 7 cm. Other glandularities, sizes and thicknesses are available. Contact CIRS Customer service for a quote.

*To have 2 cm slab with embedded detail plate placed in background compositions other than 50/50, contact CIRS Customer Service for a quote.

PHOTOTIMER COMPENSATION PLATE (INCLUDED IN 014AD & 014F)

- **Contrast Stepwedge (5 mm thickness)**
 1. Adipose tissue
 2. Glandular tissue
- **Hemispheric Masses 75% Glandular Tissue Thickness (mm)**
 3. 3.16
 4. 2.38
 5. 1.98
 6. 1.59
 7. 1.19
 8. 0.90
- **Specs Calcium Carbonate (mm)**
 9. 0.39
 10. 0.27
 11. 0.23
 12. 0.20
 13. 0.16
 14. 0.13
- **Alumina (mm)**
 15. 0.39
 16. 0.27
 17. 0.23
 18. 0.20
 19. 0.16
 20. 0.13
- **Fibril**
 21. Diameter = 25 Microns High Contrast
 22. Line pair test target



References:

White, D.R., R.J. Martin, and R. Darlison, Epoxy resin based tissue substitutes, British Journal of Radiology, 5, 814-821, 1977.

Materials are formulated to maximize simulation properties at 20 keV for the mammographic range, 80 keV for the diagnostic range and 0.5 MeV and above for the therapeutic range.

